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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,016

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Shinji Suzuki

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WASHINGTON, DC 20005

EXAMINER

DEGHAN, QUEENIE S

ART UNIT

PAPER NUMBER

1791

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,016	Applicant(s) SUZUKI ET AL.	
	Examiner QUEENIE DEGHAN	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 20-23 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuda et al. (JP 61-295253) in view of Nagao (JP2000143270). Tsuda discloses a stretching apparatus comprising a pair of gripping device capable of gripping both ends of a preform (10, 12), a heating burner (22) capable of burning combustion gases comprising oxygen and hydrogen or propane, a gripping device moving device (16), an arithmetic and control unit (36) capable of controlling the relative speed and pulling speed based on measured diameters to satisfy the claimed

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expressions, an outer diameter measuring device (18b, 18a) capable of measuring an outer diameter of the preform at positions along the longitudinal direction of the preform, and a heating device moving device (30).

4. The outer diameter measuring device is placed near the heating burner and from the drawing it appears the heating burner is disposed not far from the point at which the diameter starts changing. However, Tsuda is not specific about the distance between the burner and the diameter changing point. Nagao teaches a similar stretching apparatus comprising gripping devices, a moving device for one of the grippers and a heating device (abstract). Nagao further teaches the heating burner is distant from the position at which the outer diameter of the preform starts changing due to the movement of the heating burner and suggests this distance is from 10mm to 50mm ([0007]-[0011]). That is, Nagao suggests the heating burner is disposed at a position distant by 10mm to 50mm in a direction in which the heating burner is moved from a position at which the outer diameter of the preform starts changing due to the heat application by the burner. This allows for a more precise control of the desired outer diameter since measurement of the changing outer diameter is performed at the position at which the diameter starts changing. Since the measurement device is distant from the heating burner, diameter measurements are not affected by the heat or flame of the heating burner. Accordingly, since the outer diameter measuring device of Tsuda is distant from the heating burner, as can be seen in the drawing, and the burner of Tsuda is also moving along the preform, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a similarly distance

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(between 10mm and 50mm) between the position at which the outer diameter of the preform starts changing and the position of the heating burner of Tsuda to allow for a more precise outer diameter measurements and control of the final desired diameter of the stretched preform.

5. Regarding claim 25, Tsuda discloses a heating burner as the heating device and the combustion gas is O₂ and the flammable gas is hydrogen (abstract, Table).

6. Regarding claim 26, Tsuda further discloses a heating device moving device capable of moving the heating device in a second direction opposite the first direction (as indicated by arrow a in the drawing).

7. Claims 20-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (6,438,997) in view of Tsuda et al. (JP 61-295253). Saito disclose an apparatus for stretching optical fiber base material comprising a pair of gripping devices (3, 2), a heating device (4), a gripping device moving device (7, 8) capable of moving the gripping devices at different speeds, an outer diameter measuring device (5) capable of measuring the outer diameter of the optical fiber base material along the longitudinal direction of the optical fiber base material, and an arithmetic and control unit capable of controlling the relative speed and pulling speed based on measured diameters to satisfy the claimed expressions. Also, as can be seen in figure 1, the heating device is positioned at which the outer diameter of the optical fiber base material starts changing. (figure 1, col. 5 line 64 to col. 6 line 9, lines 49-64). Saito does not disclose the heating device as heating burner. Tsuda teaches a similar stretching apparatus wherein the heating device is a heating burner (abstract, drawing). It would

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have been obvious to one of ordinary skill in the art at the time of the invention to have utilized other well known alternatives for heating glass bodies, such as a heating burner of Tsuda, in the apparatus of Saito because it would have predictably achieve the same expected result of heating the base material for drawing.

Response to Arguments

8. Applicant's arguments filed October 22, 2009 have been fully considered but they are not persuasive. The applicant argues Nagao says nothing about controlling the position of the heating burner with respect to the point on the fiber where the diameter changes. The Examiner has submitted a translation of the Nagao reference. The claim recites positing the heating burner relative to the position where the diameter starts changing, which Nagao teaches as discussed in details in the rejection above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUEENIE DEGHAN whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/

Supervisory Patent Examiner, Art

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Q Dehghan